

IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF WISCONSIN

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LEARNING CURVE BRANDS, INC.,

Plaintiff,

v.

MUNCHKIN, INC.,

Defendant.

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OPINION and ORDER

09-cv-416-bbc

In this patent infringement suit, plaintiff Learning Curve Brands, Inc. contends that defendant Munchkin, Inc.'s disposable "sippy cups" with screw-on lids infringe plaintiff's United States Patent No. 7,185,784 (the '784 patent), a patent relating to features designed to improve the fit and seal between the lid and body of the sippy cups. Now before the court are the parties' disputes in this case regarding the scope and meaning of certain claim terms contained in the '784 patent: "snap," "similar radii," "interlocking features," "lips" and "nominal radial interference" and the surrounding text. In a previous lawsuit, plaintiff (and another plaintiff not involved in this case) brought similar claims against defendant for their previous model of disposable sippy cups. First Years, Inc. v. Munchkin, Inc., 07-cv-558-bbc. Although the parties seek construction of many of the same terms that were construed in the

previous lawsuit, they have new disputes about the meaning of the claim terms related to new features on defendant's new model of sippy cups, which use screw-on lids in place of the snap-on lids in the old model. I will address the parties' disputes and construe the terms.

## OPINION

The disputed claim terms are all found in independent claim 1 of the '784 patent, which discloses:

I. A drinking container comprising

a main body defining an interior cavity accessible through a cavity opening at an upper end of the main body, the body having a rim about its opening, the rim having a domed upper surface and inner and outer walls defining a recess there between, the outer wall of the rim having a lower, distal edge spaced apart from the inner wall to define a recess opening; and

a removable lid secured to the main body at its upper end to cover the cavity opening and enclose, together with the main body, the interior cavity to hold a liquid, the lid defining a groove about its edge sized to receive and snap over the rim of the main body and form a seal;

the lid having an extended drinking spout sized to be received within a human mouth and defining at least one hole providing hydraulic communication between exterior surfaces of the container and the interior cavity, for dispensing liquid disposed proximate an, [sic] inner end of the hole in response to a vacuum applied at an outer end of the hole; wherein

the groove about the lid has an inner surface, and the rim of the main body has an outer surface, that each define semi-circular arcs of similar radii and have interlocking features on an inboard side, the interlocking features including a first lip projecting radially outward from the lid into the groove and

a second lip projecting radially inward from the outer surface of the rim of the main body to produce a nominal radial interference between the first and second lips as the lid and main body are engaged.

A. “Snap”

The parties seek construction of the phrase “the lid defining a groove about its edge sized to receive and snap over the rim of the main body and form a seal” and have offered the following constructions:

- **Plaintiff:** The groove defined about the edge of the lid fits over the rim of the main body so that as the rim is received in the groove a portion of at least one of the lid and rim deflects to overcome an interference between them and then rebounds toward its position before deflection to form a closure to resist leakage.
- **Defendant:** The groove of the lid and the rim of the main body interact in a snap fit having an insertion, deflection and recovery action during assembly, which produces a clicking sound. (Defendant does not attempt to construe the last part of the phrase, “and form a seal.”)

1. The parties’ disputes

Although the parties seek construction of the entire phrase, their three disagreements focus on the meaning of “snap”: (1) whether the “snap” feature described in the claim must create a sound; (2) whether the required snap feature prevents the lid from also having screw-on features; and (3) whether the claim’s requirement that the lid form a seal is related to the snap feature.

a. Audible feedback

The parties' primary dispute is whether the "snap" feature described in the claim must create a sound. The parties agree that the snap feature must involve a deflection and recovery action (plaintiff calls it a "rebound") that occurs as the groove of the lid and the rim of the cup first interfere with each other and then pass by the interference as the lid is placed on the cup. According to plaintiff, the recovery that occurs as the interference is passed may occur slowly, while defendant contends that the recovery must occur quickly enough to produce a "clicking sound." I agree with plaintiff on this point.

Defendant can point to no intrinsic evidence that supports its contention that there must be a "clicking sound" as the lid and body are engaged. Where the patent specification refers to the "snap" feature, it does so without elaboration. '784 pat., col. 3, lns. 40-43 ("As shown in the enlarged views of FIGS. 4 and 5, the inner contour of groove 36 and outer contour of cup body rim 38 are selected to provide a slight snap fit of the lid onto the cup body, to provide a secure seal."); id., col. 6, lns. 66-67 ("As lid 12 is snapped into place . . ."). Nowhere does the specification suggest that the feature must create a noise or even that there is any advantage to creating an audible sound.

Although defendant points to some extrinsic evidence that could support its theory, the weight of the extrinsic evidence suggests otherwise. First, defendant cites several dictionary definitions describing the term "snap" in terms of a sound created when objects

make contact, but those definitions relate only to the lay meaning of the term. In some cases, this meaning might be the one that applies to a claim term, but “snap” is not a lay term in this context. As defendant acknowledges, the “snap” described in the term relates to a “snap fit,” ‘784 pat., col. 3, lns. 40-43, and the phrase “snap fit” is one that is given a special, technical meaning, as evidenced by the various technical publications both parties cite describing “snap fit” assemblies.

Regarding the technical meaning of “snap fit,” defendant cites two publications purportedly in support of its position, but only one of these suggests that a “snap fit” requires sound feedback. Dominick V. Rosato, The Plastics Engineering, Manufacturing & Data Handbook 864 (2001) (included as exhibit 1 to dkt. #22) (“In the assembly process, a snap fit undergoes an energy exchange with a click sound.”). The other technical reference defendant cites defines a snap fit as “an insertion, deflection and recovery action during assembly.” Tim A. Osswald, International Plastics Handbook 500 (2006) (included as exhibit 2 to dkt. #22). (Defendant suggests that now Osswald has provided deposition testimony supporting defendant’s theory. However, Osswald stated only that “*typically* . . . you hear the snap” during snap fit assembly, not that audible feedback was a necessary feature.)

Moreover, as plaintiff points out, other engineering literature supports the conclusion that audible feedback is an “enhancement” that is not required for a snap fit. Paul R.

Bonenberger, The First Snap-Fit Handbook 95-96, 104-105 (2000) (included as exhibit 3 to dkt. #26) (stating that some sort of feedback is “required” in all snap fit applications, but that such feedback may be tactile, audible or visible); Robert W. Messler Jr., “Integral attachment using snap-fit features,” Assembly Automation, Vol. 17, No. 2, 146 (1997) (included as exhibit 4 to dkt. #32) (describing enhancement features, including audible feedback, as features that “are not essential” to a snap fit).

In sum, no intrinsic evidence suggests that audible feedback is required for the invention, and the extrinsic evidence weighs against reading “snap” as requiring audible feedback. Therefore, I will not read such a limitation into the claim.

b. Screw-on lid

This dispute involves the more general question whether the snap feature required in claim 1 is “incompatible” with a screw-on lid in the sense that no such lid could satisfy the “snap over” requirement. On its face, the claim’s requirement that the groove of the lid be “sized to receive and snap over the rim of the main body” seems directed at snap-on lids, as opposed to screw-on lids. However, as I explained above, the phrase requires only that there be a snap fit between the lid and the body, which means the lid and body include features that cause deflection and recovery as the lid is being engaged to the body. Thus, the question must be whether such deflection and recovery assembly features inherent in a “snap

fit” are incompatible with screw-on assembly features.

As to that question, defendant cites technical literature stating that “threaded fasteners” are a separate category of fastener from “snap-fit interfaces” and that “experience with threaded fasteners, the most common method of mechanical attachment, is not transferable to designing snap-fit interfaces.” Paul R. Bonenberger, The First Snap-Fit Handbook 5. Although this literature suggests that threaded and snap-fit fasteners are *different*, it does not suggest that they are incompatible. The literature defendant cites is just as silent as the patent specification and claims on the question whether threaded attachments could be used *in conjunction* with the “snap” assembly described in the claim.

Defendant points out that, although the claims and specification are now silent on “threaded” connections, it was not always so. The prosecution history shows that, as it was filed originally, the specification referred to a separate “threaded connection” embodiment. In particular, it stated that, aside from the “snap connection” it described, “other methods of securing the lid to the body are envisioned. For example, a threaded connection may be provided about the cup rim.” File History, dkt. #23, exh. 4, at 82. The applicants filed an amendment withdrawing several canceled claims and redacting certain language from the specification, including the reference to the “threaded connection.” In a remarks section of the amendment, the applicants stated that, aside from withdrawing the claims, they “have also redacted the specification to remove discussion of aspects of the invention not relevant

to the claims as now pending.”

Defendant suggests that the applicants *disclaimed* any cup having thread attachments. Far from it. Disclaimer occurs only when the applicant makes “clear and unmistakable” disavowal of claim coverage during the prosecution of the patent, such as when the applicant characterizes the invention in a certain way to try to overcome rejections based on prior art. Computer Docking Station Corp. v. Dell, Inc., 519 F.3d 1366, 1374 (Fed. Cir. 2008) (citations omitted). No such disavowal occurred here. The applicants’ statement that the redacted language was not “relevant” is not an express statement that cups having threaded connections (in addition to a snap feature) are not compatible with the invention covered by the claim language; at most, it was a statement that threaded connections are not *necessary* for any claim described in the patent, a natural result of the withdrawal of the dependent claim or claims requiring a threaded connection.

Because nothing in the intrinsic or extrinsic evidence supports defendant’s contention that the snap feature described in claim 1 is incompatible with threaded connections, I conclude that no such limitation exists.

c. Relationship to sealing requirement

The third disagreement involving the “snap” feature is whether it is related to the “sealing” feature. Plaintiff contends that “it is the snap fit that forms a seal in the claimed



cup,” dkt. #31, at 2 n.2, and defendant argues that “these are actually different limitations that are directed to different, unrelated functions,” dkt. #21, at 9. The language to be construed describes a lid sized to do two things (“snap over the rim . . . *and* form a seal”), but does not specify whether the lid is sized to snap over the rim *and thereby* form a seal or just sized so that it happens to do two separate things: snap over the rim and form a seal.

The specification answers this question, explaining in the context of describing an embodiment that “the inner contour of the groove 36 and outer contour of cup body rim 38 are selected to provide a slight snap fit of the lid onto the cup body, *to* provide a secure seal.” ‘784 pat., col. 3, lns. 40-43 (emphasis added). Although defendant may be correct that the general function of a “snap” fit does not necessarily include a requirement that the fit also seal the lid to the body, in this case the intrinsic evidence shows that the “snap” fit in this invention is intended to form the seal disclosed in claim 1. Therefore, I agree with plaintiff that a proper construction should include language that makes it clear that the snap fit serves to seal the lid and body.

## 2. The court’s construction

Having resolved the parties’ three discrete disputes, the final question is what to do with the specific language proposed. As to this term, I have decided all three in favor of plaintiff. Defendant identifies no other problem with plaintiff’s proposed construction and

plaintiff's construction adequately reflects the parties' agreements about the nature of a "snap fit" and the court's conclusions with respect to their disagreements. Therefore, I will adopt plaintiff's proposed construction: "The groove defined about the edge of the lid fits over the rim of the main body so that as the rim is received in the groove a portion of at least one of the lid and rim deflects to overcome an interference between them and then rebounds toward its position before deflection to form a closure to resist leakage."

#### B. "Similar Radii"

The parties seek construction of the phrase "wherein the groove about the lid has an inner surface, and the rim of the main body has an outer surface, that each define semi-circular arcs of similar radii." Their proposed constructions are:

- **Plaintiff:** The semi-circular arcs defined by the upper, inner surface of the groove about the lid and the upper, outer surface of the rim of the main body correspond such that the first and second lips produce a nominal radial interference as the lid and main body are engaged.
- **Defendant:** The inner surface of the groove and the rim of the main body are curved at respective radii so that the inner surface and the rim remain in close contact with each other throughout their extent of curvature when assembled.

#### 1. The parties' disputes

As plaintiff puts it, "there is no common ground shared between the parties' proposed

definitions” for this term. Dkt. #31, at 21. This may explain why, from the court’s perspective, neither construction is satisfactory. Plaintiff’s construction would require only that the “semi-circular arcs” be capable of “correspond[ing]” in a way that allows the first and second lips to produce nominal radial interference as the lid and main body are engaged. This proposal is problematic because the claim *already* requires that the first and second lips produce nominal radial interference as they are engaged, suggesting that “similar radii” is devoid of independent meaning.

On the other hand, defendant’s construction suggests that “similar” should mean “identical”; how else could the respective surfaces remain in contact throughout the extent of curvature? To the extent defendant uses the phrase “close contact” to suggest that there can be some variation, the word is unclear and unhelpful in explaining how “close” to identical the radii must be to comply with defendant’s construction. Such a construction is bound to create another round of arguments about the meaning of the claim terms at the summary judgment stage.

Plaintiff points out that its construction would not render the claim term *entirely* redundant because it adds that the semi-circular arcs must help create the nominal radial interference disclosed in claim 1, a requirement supported by the specification. The specification describes the semi-circular arcs as playing a part in “provid[ing] the slight snap fit of the lid onto the cup body,” explaining that the semi-circular arcs form part of the

“inner contour of the groove 36 and outer contour of the cup body rim 38” that serve to create the snap fit. ‘784 pat., col. 3, lns. 40-45.

However, plaintiff’s point does not explain why the patent applicants described the radii of the arcs as similar. The claim language does not say “capable of creating nominal radial interference”; it says “of similar radii.” Plaintiff’s construction suggests that radii that are not “similar” in any sense of the term could still be infringing so long as they nonetheless assist in creating a nominal radial interference. Plaintiff cannot eviscerate specific limiting terms in the claim language by focusing on the larger purpose of the patent; if the patent applicants chose “similar radii,” plaintiff is stuck with that limitation, even if it turns out that similar radii were not necessary to create the snap fit that is the focus of the patent.

The next question is, how different can the radii of the arcs be and still be considered “similar”? As I explained above, defendant’s proposed construction requiring the arcs to remain in “close contact” is unhelpful. More helpful is the description of “similar” radii that defendant uses in its brief: “nearly continuous contact over the extent of the semi-circular arcs” when the cup and lid are assembled. Dkt. #29, at 25. This description involves two important points: the arcs contact each other when assembled in “nearly” all places and the contact is made over the entire semi-circular arc (as opposed to all on one side).

I am persuaded that this description captures the requirement that the radii be “similar” and will construe the term accordingly. The ordinary meaning of “similar” and the

specification support a reading of “similar” that requires “nearly continuous contact over the extent of the” arcs. First, as plaintiff points out, common dictionary definitions of “similar” include having a likeness or resemblance and being alike in substance or essentials. The only way that two radii of semi-circular arcs could be “similar” is for the *size* of each radius to be “alike.” (What other feature of a radius could be similar or different?) Moreover, the only apparent rationale for having the size of one of the radii approximate the other is that provided by defendant’s expert: when the arc of one radius is slightly smaller than the other, the smaller arc will fit “snugly” with the larger arc throughout the extent of their curvatures. Dkt. #22, ¶ 17. (Although plaintiff may argue that the ability to create nominal radial interference is the proper “rationale” for similar radii, this “rationale” does not explain why the *sizes* of the radii should be similar, as I explained above.)

That said, defendants must accept the possibility that some spaces may exist between the semi-circular arcs of “similar radii,” which is the position they argued in the original lawsuit. First Years, 07-cv-558-bbc, dkt. #59, at 108-09, 114. However, the phrase “nearly continuous” encompasses that notion. It also emphasizes the important point that any gaps are not created by major size differences between the radii, but rather by either minor size differences (such that the smaller arc would not fit snugly on both ends, for example) or by acceptable imperfections in the “semi-circular” arc.

## 2. The court's construction

Because I conclude that defendant's view better describes "similar radii," I will adopt its proposed construction, with modifications: **"The inner surface of the groove and the rim of the main body are curved at respective radii so that the inner surface and the rim remain in nearly continuous contact over the extent of the semi-circular arcs when the lid and body are assembled."**

### C. "Interlocking Features"

The parties propose:

- **Plaintiff:** One or more portions of the lid and the rim of the main body that cooperate to create[,] as the lid and the main body are engaged[,] a constraint that helps maintain the engagement of the lid and the main body.
- **Defendant:** Features that lock together in a secure manner such that the features positively constrain motion that would cause them to unlock.

## 1. The parties' disputes

Many of the parties' disputes seem to have been resolved in the course of briefing. Defendant expressed concern that plaintiff's construction removed a requirement that the "interlocking features" be on the inboard side and improperly broadened the meaning of interlocking features to include features held together by friction. In response, plaintiff has

stated that it agrees that “interlocking features” must be on the inboard side and it does not challenge defendant’s contention that interlocking features do not include features held together by friction. Dkt. #31, at 9, 12. (Plaintiff states that it agrees with defendant that a friction fit is different from a snap fit and it does not challenge defendant’s contention that “interlocking features” requires more than a friction fit.)

What is left is minor. Plaintiff takes issue with defendant’s use of the word “secure” because that word is not clear enough to be helpful. (In the previous lawsuit, I rejected defendant’s proposed construction incorporating the word “secure” on the same ground, First Years, 07-cv-558-bbc, dkt. #27, at 37.) Although defendant contends that the word “secure” is “defined” by the surrounding language it proposes (“positively constrain”), this just shows that the word “secure” is redundant in defendant’s construction. If “secure” means simply “positively constrained,” there is no need to use both terms.

The only other question is whether the phrase “positively constrain” is more accurate than the word “constrain” in describing the role of the “interlocking features.” I agree with plaintiff that the word “positively” does not add anything except confusion. For one thing, it is not clear what it means to “positively” constrain something. To the extent it suggests that the interlocking features must remain in constant contact during assembly, I have already rejected that construction. Id. at 27-28. As for the suggestion that the word “positively” makes it clear that the constraint required must involve more than friction, I am

not persuaded. To use defendant's example, a cork in a bottle (a friction fit) is "positively constrained."

Defendant's concern about allowing mere friction fits to count as "interlocking" is better addressed by describing the constraint with more specific terms. Defendant describes a few such alternatives, such as constraints that "hoo[k], interlac[e] or interweav[e]." I find, however, a description that plaintiff suggests describes the needed limitation more clearly: the constraint must be "created by an obstruction between structures of the interlocking features" as opposed to mere friction of the structures. Dkt. #31, at 12.

## 2. The court's construction

Having addressed the parties' disputes, I conclude that plaintiff's proposed construction of the term "interlocking features" properly describes the limitations of the term, once it is modified to address defendant's concern regarding friction fits. The court's construction is: **"One or more portions of the lid and the rim of the main body that create an obstruction between each other as the lid and main body are engaged, resulting in a constraint that helps maintain the engagement of the lid and the main body."**



#### D. “Lip”

The parties’ disputes regarding “lip” relate to three terms: “lip,” “a first lip projecting radially outward from the lid” and “a second lip projecting radially inward from the outer surface of the rim of the main body.” Their proposed constructions for the three terms are as follows:

##### “lip”

- **Plaintiff:** (Plaintiff does not propose a specific construction, but does state that “the only requirement regarding the lips is that they protrude such that they form a nominal radial interference.”)
- **Defendant:** A protrusion that projects away from a surface by a sufficient amount so that it is clearly and noticeably away from the surface.

##### “a first lip projecting radially outward from the lid into the groove”

- **Plaintiff:** The first lip is a protrusion on the inboard side of the inner surface of the groove defined about the edge of the lid where each point of the protrusion extends from the inner surface of the groove in a direction along a radius away from the center of the lid into the groove.
- **Defendant:** A first lip that projects outwardly in the radial direction from the lid into the groove.

##### “a second lip projecting radially inward from the outer surface of the rim of the main body”

- **Plaintiff:** The second lip is a protrusion on the inboard side of the outer surface of the rim of the main body where each point of the protrusion extends from the outer surface of the rim in a direction along a radius toward the center of the main body.

- **Defendant:** A second lip that projects inwardly in the radial direction from the outer surface of the rim of the main body.

1. The parties' disputes

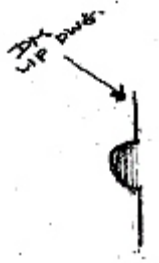
a. "lip"

The parties' principal dispute relates to the meaning of "lip." Plaintiff contends that it is enough to require that the lips "protrude" in a way that allows them to form a "nominal radial interference" as the claim requires." Plaintiff's construction suggests that "lip" has little meaning on its own. The claim language requires explicitly that the lips "produce a nominal radial interference," so it would be superfluous to define them as being capable of producing nominal radial interference. The only other thing plaintiff's construction accomplishes is to describe the lips as "protrusions."

The parties agree that a lip must be a "protrusion." What defendant's construction adds is that the protrusion must project away from the surface "clearly and noticeably." However, as plaintiff points out, the phrase "clearly and noticeably" is vague and appears to be a subjective standard. Neither vague nor subjective standards help explain the scope of the claim term.

Defendant seeks to hold plaintiff to earlier statements. First, in the previous lawsuit, a Rule 30(b)(6) witness of plaintiff's stated that a lip had to be "totally away from the

surface” and drew the following diagram in explanation:



Dkt. #23, Exh. 2D, at 142, exh. 3. The problem is that the Rule 30(b)(6) witness was not providing expert testimony. Plaintiff should not be held to that witness’s position on technical matters. I explained this to defendant in the previous suit. First Years, 07-cv-558-bbc, dkt. #241, at 52.

Next, plaintiff made certain arguments about the meaning of “lip” in the previous lawsuit; in particular, plaintiff argued that a diagram from the prior art, United States Patent 2,833,324, does not show a lip:



Plaintiff acknowledges that the ‘324 patent does not disclose a “lip,” but explains that its definition would not include surfaces such as those disclosed in the ‘324 patent as “lips” because such surfaces are “projections *of* a surface” whereas plaintiff’s definition requires a “lip” to be a “protrusion *from* a surface.” Dkt. #31, at 15 (emphasis in original). I agree

with plaintiff that it is enough to describe “lips” as “protrusions” from a surface to distinguish them from mere angled surfaces.

Although defendant would add the requirement that the “lip” be “clearly and noticeably away” from the surface, the claim requires only that the “lips” produce a nominal radial interference; it includes no special size requirements on the lips. Indeed, defendant cannot point to any intrinsic or extrinsic evidence to support placing an arbitrary minimum on the amount of protrusion necessary to qualify as a “lip.”

b. “projecting radially”

The other dispute between the parties involves the direction of the “lip.” The claim language requires that the lips “projec[t] radially.” (The lip on the lid projects “radially outward” and the lip on the cup projects “radially inward.”) Neither parties’ construction is satisfactory. Defendant’s construction simply rearranges the words already in the patent: “projects . . . in the radial direction.” Plaintiff’s construction is confusing: “each point of the protrusion extends . . . in a direction along a radius.” As defendant notes, a *point* cannot extend. Plaintiff clarifies its position in its response brief, explaining that “the construction only means that if you pick a representative point on the surface of the lips, the lip points or extends either toward or away from the center, that is, along a radi[us].” Dkt. #31, at 18. This explanation is not very helpful.

What does help somewhat is plaintiff's explanation that the term "radially" refers to the radius from the center of the cup (or lid), so "projecting radially" means "along a line to (or from) the center." Defendant does not disagree, but points out that plaintiff's definition of "projecting radially" point-by-point allows for the possibility of an infinite number of different projecting points from different radii. Plaintiff's attempt to describe the projection on a point-by-point basis must come from the fact that not all the points of the lip *can* be in a single line pointing toward the center of the cup (or away from the center of the lid).

Plaintiff's general idea seems correct. The confusion lies in describing how these "points" extend away from or toward the center. Perhaps that confusion could be cleared away by explaining where each of these points must be with respect to the center and the *surface* from which the lip protrudes. However, it is not clear whether such a point-by-point analysis is necessary or required by the patent. Defendant does not suggest that it is and plaintiff does not explain why it would be. To the extent plaintiff is concerned that not all the points on the lip will be along the same "radius," defendant has not raised that argument and a "single radius" requirement would not be a practical reading of the term "radially." At this point, rather than repair the constructions proposed, it makes more sense to simply decline to construe the term. If the parties continue to dispute the meaning of the term at summary judgment, they can describe their concerns more clearly and provide more precise definitions at that time.

## 2. The court's construction

As I explained above, I will not construe those terms related to “projecting radially” at this stage. As for “lip,” it is enough to describe it as a “**protrusion**.” Defendant’s additional limitations are not supported by the extrinsic or intrinsic evidence and plaintiff’s additional language is unnecessary in light of the surrounding claim language imposing the restrictions plaintiff describes.

### E. “Nominal Radial Interference”

The parties seek construction of the phrase “a nominal radial interference between the first and second lips as the lid and main body are engaged” and offer the following constructions:

- **Plaintiff:** The first lip protrudes sufficiently from the inner surface of the groove and the second lip protrudes sufficiently from the outer surface of the rim so that, as the lid and the main body are engaged, the lips contact each other and a portion of at least one of the lips deflects, where each point of contact between the lips occurs in a direction along a radius of the cup.
- **Defendant:** The outward extension of the first lip in the radial direction and the inward extension of the second lip in the radial direction overlap each other to cause deflection of the first and second lips during the process of assembling the lid and the cup.

## 1. The parties' disputes

The parties' primary dispute is whether both lips must deflect as the lid and cup are engaged or whether it is sufficient that one of the lips deflect during the process. Unsurprisingly, defendant is seeking the narrower reading. However, the evidence does not support such a limitation. The one piece of intrinsic evidence that remotely supports requiring both lips to deflect is the fact that the preferred embodiment is "molded by a polypropylene." '784 pat., col. 3, ln. 4. As defendant points out, polypropylene is flexible, suggesting that the lips would bend. Defendant's argument fails for a number of reasons. First, a preferred embodiment is rarely grounds for importing a limitation into a claim; defendant has not explained why the preferred material, polypropylene, should become the *required* material. Moreover, even polypropylene lips do not *necessarily* deflect; a lip supported by a sturdier base may not deflect at all as it passes by a lip supported by a much flimsier base. Thus, even the preferred embodiment does not require that both lips deflect.

Defendant's other argument in support of requiring both lips to deflect comes from testimony plaintiff's expert provided at a deposition. In particular, he answered the following question:

23 Q Okay. So the deflection is essentially, and I'm going  
24 to talk very simply, when the lips are moving past  
25 each other, they're each squished a little bit to get  
1 past each other as they're being engaged?

... .

4 A Correct.

Dkt. #23, Exh. 10, at 61-62. This statement is a far cry from admitting that the claim requires both lips to deflect. In short, I am not persuaded that the intrinsic or extrinsic evidence supports requiring both lips to deflect to achieve “nominal radial interference.”

The other dispute involves plaintiff’s proposed requirement that “each point of contact between the lips occurs in a direction along a radius of the cup.” As with plaintiff’s proposed constructions for “projecting radially,” the reference here to a point occurring “in a direction” along a radius does not make sense. Plaintiff has no response to this. As with the concerns related to the proposed constructions for “projecting radially,” it is not clear whether clearing up this confusion is necessary to resolve the parties’ disputes. Therefore, I will decline to include that phrase. If the parties continue to disagree about whether such a limitation is required, they may address the matter at summary judgment.

## 2. The court’s construction

Because I agree with the gist of plaintiff’s proposed construction, I will adopt it, with modifications to eliminate the questionable phrase related to “each point of contact.” The construction is as follows. **“The first lip protrudes sufficiently from the inner surface of the groove and the second lip protrudes sufficiently from the outer surface of the rim so that, as the lid and the main body are engaged, the lips contact each other and a portion of at least one of the lips deflects.”**



## ORDER

IT IS ORDERED that the terms disputed by plaintiff Learning Curve Brands, Inc. and defendant Munchkin, Inc. in U.S. Patent No. 7, 185,784 are construed as follows:

- “the lid defining a groove about its edge sized to receive and snap over the rim of the main body and form a seal” means “the groove defined about the edge of the lid fits over the rim of the main body so that as the rim is received in the groove a portion of at least one of the lid and rim deflects to overcome an interference between them and then rebounds toward its position before deflection to form a closure to resist leakage”;
- “wherein the groove about the lid has an inner surface, and the rim of the main body has an outer surface, that each define semi-circular arcs of similar radii” means: “the inner surface of the groove and the rim of the main body are curved at respective radii so that the inner surface and the rim remain in nearly continuous contact over the extent of the semi-circular arcs when the lid and body are assembled”;
- “interlocking features” means : “One or more portions of the lid and the rim of the main body that create an obstruction between each other as the lid and main body are engaged, resulting in a constraint that helps maintain the engagement of the lid and the main body”;
- “lip” means “protrusion”; and

- “a nominal radial interference between the first and second lips as the lid and main body are engaged” means: “the first lip protrudes sufficiently from the inner surface of the groove and the second lip protrudes sufficiently from the outer surface of the rim so that, as the lid and the main body are engaged, the lips contact each other and a portion of at least one of the lips deflects.”

Entered this 22<sup>nd</sup> day of March, 2010.

BY THE COURT:

/s/

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BARBARA B. CRABB

District Judge